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1. A magnetic write head, having an ABS and reduced adjacent track erasure, comprising:

upper and lower poles separated by a write gap, there being an indentation in an outer surface of said lower pole whereby a recess is present in the ABS.

5 2. A magnetic write head comprising:

an ABS and top and bottom poles separated by a write gap;

said bottom pole further comprising:

a first lower part having a first height, an outer surface that is coplanar with the ABS, and a first width;

10 on said first lower part, a second lower part having a second height, a second width that is less than said first width, an outer surface that is coplanar with the ABS, and an opposing inner surface;

15 on said second lower part, a third lower part having a third height, a third width that is less than said second width, and an inner surface that is coplanar with that of said second part;

on said third lower part, a fourth lower part having a fourth height, an inner surface that is coplanar with said second and third parts' inner surfaces, and an outer surface that is coplanar with the ABS, whereby a recess is present in the ABS; and

20 a flux concentration sub-pole on said fourth lower part.

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3. The magnetic write head described in claim 2 wherein said first height is between about 0.6 and 2.5 microns.

4. The magnetic write head described in claim 2 wherein said first width is between about 1.4 and 2.6 microns.

5 5. The magnetic write head described in claim 2 wherein said second height is less than about 3 microns.

6. The magnetic write head described in claim 2 wherein said second width is between about 0.6 and 2 microns.

10 7. The magnetic write head described in claim 2 wherein said third height is between about 0.5 and 3 microns.

8. The magnetic write head described in claim 2 wherein said third width is between about 1.4 and 2.6 microns.

9. The magnetic write head described in claim 2 wherein said fourth height is between about 0.5 and 2 microns.

10. A magnetic write head comprising:

an ABS and top and bottom poles separated by a write gap;

said bottom pole further comprising:

a first lower part having a first height, a first width, and an outer surface that

is coplanar with the ABS;

on said first lower part, a second lower part having a second height, a

second width that is less than said first width, and an outer surface that is coplanar

with the ABS;

centrally disposed on said second lower part, a third lower part having a third

height, and a third width that is less than said second width;

symmetrically disposed on said third lower part, a fourth lower part, having

a fourth height, an inner surface that is coplanar with that of said second lower part,

and an outer surface that is coplanar with the ABS, whereby a recess is present in

the ABS; and

a flux concentration sub-pole on said fourth lower part.

11. The magnetic write head described in claim 10 wherein said first height is between about 0.6 and 2.5 microns.

12. The magnetic write head described in claim 10 wherein said first width is between about 1.4 and 2.6 microns.

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13. The magnetic write head described in claim 10 wherein said second height is less than about 3 microns.

14. The magnetic write head described in claim 10 wherein said second width is between about 0.6 and 2 microns.

5 15. The magnetic write head described in claim 10 wherein said third height is between about 0.5 and 3 microns.

16. The magnetic write head described in claim 10 wherein said third width is between about 1.4 and 2.6 microns.

10 17. The magnetic write head described in claim 10 wherein said fourth height is between about 0.5 and 2 microns.

18. A magnetic write head comprising:

an ABS and top and bottom poles separated by a write gap;

said bottom pole further comprising:

a first lower part having a first height, a first width, and an outer surface that

15 is coplanar with the ABS;

on said first lower part, a second lower part having a second height, a

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second width that is less than said first width, and outer surface that is inwardly displaced from the ABS by an amount;

on said second lower part, a third lower part having a third height, a third width, an inner surface that is coplanar with that of said second lower part, and an outer surface that is coplanar with the ABS, whereby a recess is present in the ABS; and

a flux concentration sub-pole on said fourth lower part.

19. The magnetic write head described in claim 18 wherein said first height is between about 0.6 and 2.5 microns.

20. The magnetic write head described in claim 18 wherein said first width is between about 0.6 and 2 microns.

21. The magnetic write head described in claim 18 wherein said second height is between about 1 and 5 microns.

22. The magnetic write head described in claim 18 wherein said second width is between about 1.4 and 2.6 microns.

23. The magnetic write head described in claim 18 wherein said third height is between

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about 0.5 and 2 microns.

24. The magnetic write head described in claim 18 wherein said third width is between about 1.4 and 2.6 microns.

25. The magnetic write head described in claim 18 wherein said amount that said outer
5 surface of said second lower part is inwardly displaced from the ABS is between about 0.4 and 1.5 microns.

26. A magnetic write head comprising:

an ABS and top and bottom poles separated by a write gap;

said bottom pole further comprising:

10 a first lower part having a first height, a first width, and an outer surface that is inwardly displaced from the ABS by an amount;

on said first lower part, a second lower part having a second height, a second width that is less than said first width, and an outer edge that is coplanar with that of said first lower part;

15 on said second lower part, a third lower part having a third height, a third width, an inner surface that is coplanar with that of said second lower part, and an outer surface that is coplanar with the ABS, whereby a recess is present in the ABS; and

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a flux concentration sub-pole on said fourth lower part.

27. The magnetic write head described in claim 26 wherein said first height is between about 0.6 and 2.5 microns.

28. The magnetic write head described in claim 26 wherein said first width is between
5 about 0.6 and 2 microns.

29. The magnetic write head described in claim 26 wherein said second height is between about 1 and 5 microns.

30. The magnetic write head described in claim 26 wherein said second width is between about 1.4 and 2.6 microns.

10 31. The magnetic write head described in claim 26 wherein said third height is between about 0.5 and 2 microns.

32. The magnetic write head described in claim 26 wherein said third width is between about 1.4 and 2.6 microns.

33. The magnetic write head described in claim 26 wherein said amount that said outer

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surface of said first lower part is inwardly displaced from the ABS is between about 0.4 and 1.5 microns.

34. A method to reduce adjacent track erasure in a magnetic write head having an ABS, comprising:

5 providing upper and lower poles, separated by a write gap, and indenting said lower pole whereby a recess is present in the ABS at a distance below said write gap.